

also be treated. On the other hand, perfusing vessels in nonpulsatile aneurysms are observed for signs of aneurysm growth. If the etiology of the endoleak is unclear, we find ourselves in a quandary and undergo a detailed evaluation of the potential collateral vessels. We may rely on the expected decrease in aneurysm size to help delineate a treatment course, or we may perhaps even treat the endoleak merely to definitively establish the diagnosis. A nonpalpable aneurysm is treated in a more aggressive fashion than a palpable, nonpulsatile aneurysm. In this situation, we believe the risks of observation are largely unknown, and without knowledge of the extent of the physical forces on the aneurysm wall, the risks of observation may outweigh the risks of treatment. Quantifications of these forces are under investigation but have not yet entered into the clinical arena.^{6,7} Although some may criticize this protocol as being overly aggressive, we believe that the overall validity of endovascular repair will depend on long-term efficacy, which is, at this point, undefined.

Differences between this decision tree and published regimens include a means to determine the need for aggressiveness in patients with either undefinable endoleaks or those caused by perfusing vessels. Fundamental to this algorithm is that the follow-up physical examinations be coupled with radiographic evaluation and that a clinician evaluate the patient both before and after surgery, paying careful attention to the findings of the physical examination. Furthermore, this information should be noted in follow-up examination. Because endovascular grafting techniques have lead us down a highly technical path, we are, in a sense, recommending a step backward to reemphasize the role and need for the clinical examination.

Roy Greenberg, MD

Department of Vascular Surgery
Cleveland Clinic Foundation

Richard Green, MD

Division of Vascular Surgery
University of Rochester

REFERENCES

1. White G, Yu W, May J, Chaufour X, Stephen M. Endoleak as a complication of endoluminal grafting of abdominal aortic aneurysms: classification, incidence, diagnosis, and management. *J Endovasc Surg* 1997;4:152-68.
2. White G, May J, Waugh R, Chaufour X, Yu W. Type III and type IV endoleak: toward a complete definition of blood flow in the sac after endoluminal AAA repair. *J Endovasc Surg* 1998;5:305-9.
3. May J, White G, Yu W, Waugh R, Stephen M, Chaufour X, et al. Endovascular grafting for abdominal aortic aneurysms: changing incidence and indication for conversion to open repair. *Cardiovasc Surg* 1998;6:194-7.
4. Torsello GB, Klenk E, Kasprzak B, Umscheid T. Rupture of abdominal aortic aneurysm previously treated by endovascular stentgraft. *J Vasc Surg* 1998;28:184-7.
5. Lumsden A, Allen R, Chaikof E, Resnikoff M, Moritz M, Gerhard H, et al. Delayed rupture of aortic aneurysms following endovascular stent grafting. *Am J Surg* 1995;170:178.
6. Malina M, Länne T, Ivancev K, Lindblad B, Brunkwall J.

Reduced pulsatile wall motion of abdominal aortic aneurysms after endovascular repair. *J Vasc Surg* 1998;27:624-31.

7. Marty B, Sanchez LA, Ohki T, Wain RA, Faries PL, Cynamon J, et al. Endoleak after endovascular graft repair of experimental aortic aneurysms: does coil embolization with angiographic "seal" lower intraaneurysmal pressure? *J Vasc Surg* 1998;27:454-62.

24/41/103790

doi:10.1067/mva.2000.103790

Regarding "In situ replacement of infected aortic grafts with rifampicin-bonded prostheses: the Leicester experience (1992 to 1998)"

To the Editors:

In the article by Hayes and colleagues (*J Vasc Surg* 1999;30:92-8), the authors referred to one of our publications and erroneously stated that we have suggested that a polytetrafluoroethylene graft may be used for in situ replacement of infected aortic prostheses.¹ The paper that the authors refer to was addressing whether infected prosthetic grafts could be preserved successfully, but never suggested that a new prosthetic graft be used to replace a previously excised infected prosthetic graft. We have never suggested this as a option to treat infected prosthetic grafts.² We believe that it is extremely important that readers of the article by Hayes et al do not believe that we are in favor of placing a new prosthetic graft into an infected field, although the role of rifampicin-bonded prostheses may prove to be useful.

Keith D. Calligaro, MD

Pennsylvania Hospital
Philadelphia, Pa

REFERENCES

1. Calligaro KD, Veith FJ, Schwartz M, et al. Are gram negative bacteria a contraindication to selective preservation of infected prosthetic grafts? *J Vasc Surg* 1992;16:337-46.
2. Calligaro KD, Veith FJ, Schwartz M, et al. Selected preservation of infected prosthetic arterial grafts: analysis of a 20 year experience of 120 extra cavitory infected grafts. *Ann Surg* 1994;220:461-71.

24/41/105672

doi:10.1067/mva.2000.105672

Reply

We are pleased that Dr Calligaro notes that in situ replacement with rifampicin-bonded grafts may have a role to play in the management of graft infection. We accept that Dr Calligaro and colleagues¹ have not previously recommended the replacement of infected prosthetic grafts with a further prosthetic graft, rather their selective preservation in extracavitary graft infections. For intracavitary infections, the focus of our paper, the mainstays of treatment are graft excision followed by either in situ replacement or extra-anatomic bypass (EAB). We believe that in situ replacement overcomes a number of the problems of EAB, namely, stump blowout, poor flows, lower patency, and prolonged procedure time. The use of antibiotic-bonded grafts may